UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

04743

7590

10/27/2003

MARSHALL, GERSTEIN & BORUN LLP 6300 SEARS TOWER 233 S. WACKER DRIVE CHICAGO, IL 60606 EXAMINER SPEARS, ERIC J

PAPER NUMBER

ART UNIT

DATE MAILED: 10/27/2003

2878

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,951	12/14/2001	Soo-Chang Choi	29926/38004	7382

TITLE OF INVENTION: CMOS IMAGE SENSOR HAVING A CHOPPER-TYPE COMPARATOR TO PERFORM ANALOG CORRELATED DOUBLE SAMPLING

ı	APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
	nonprovisional	NO	\$1330	\$300	\$1630	01/27/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATEN PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHT THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPO PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM TH MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THE STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOV REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (O AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILD BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is n claiming SMALL ENTITY status, check the box below and enclo the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) w your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed n or after Dec. 12, 1980 may require payment maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE
Commissioner for Patents
P.O. B x 1450
Alexandria, Virginia 22313-1456

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INSTRUCTIONS: This for appropriate. All further con	rm should be used for tran	smitting the ISSU Patent, advance or	or F E FEE and I ders and notif	PUBLICATION FEE (if refication of maintenance fee	quired). Blocks 1 through 4 s s will be mailed to the current	hould be completed wh		
indicated unless corrected in maintenance fee notification	below or directed otherwise	in Block 1, by (a) specifying a	new correspondence addre	ess; and/or (b) indicating a sep	arate "FEE ADDRESS"		
	E ADDRESS (Note: Legibly mark-up	with any corrections or	use Block I)	papers. Each additi-	Note: A certificate of mailing can only be used for domestic mailings of Fee(s) Transmittal. This certificate cannot be used for any other accompany papers. Each additional paper, such as an assignment or formal drawing, m have its own certificate of mailing or transmission.			
·	ERSTEIN & BORU!	VIIP			•	uindo-		
6300 SEARS TOW 233 S. WACKER I CHICAGO, IL 606	/ER ORIVE	(DD)		I hereby certify tha States Postal Service addressed to the N	Certificate of Mailing or Tran t this Fec(s) Transmittal is bein be with sufficient postage for fin Aail Stop ISSUE FEE address SPTO, on the date indicated be	g deposited with the Un est class mail in an envel above, or being facsim		
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10/016,951	12/14/2001		Soo-Char	ng Choi	29926/38004	7382		
TITLE OF INVENTION: C	MOS IMAGE SENSOR HA	VING A CHOPPE	R-TYPE CO	MPARATOR TO PERFOR	M ANALOG CORRELATED	DOUBLE SAMPLING		
APPLN. TYPE	SMALL ENTITY	ISSUE FI	EE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE		
nonprovisional	nonprovisional NO)	\$300	\$1630	01/27/2004		
EXAM	IINER	ART UN	TI	CLASS-SUBCLASS	٦			
SPEARS	, ERIC J	2878		250-208100				
I. Change of correspondence	address or indication of "F	ee Address" (37	2. For prin	iting on the patent front pa	ge, list (1) the			
CFR 1.363).			names of	p to 3 registered patent attorneys or 1				
☐ Change of corresponde Address form PTO/SB/12	ence address (or Change of C 22) attached.	Correspondence	agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or 2					
☐ "Fce Address" indicati PTO/SB/47; Rev 03-02 of Number is required.	on (or "Fee Address" Indicator more recent) attached. Use	tion form e of a Customer	agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.					
3. ASSIGNEE NAME AND	RESIDENCE DATA TO B	E PRINTED ON T	THE PATENT	(print or type)				
PLEASE NOTE: Unless been previously submitte (A) NAME OF ASSIGN				r on the patent, Inclusion o Completion of this form is N E: (CITY and STATE OR (f assignee data is only appropri OT a substitute for filing an ass COUNTRY)	ate when an assignment signment.		
Please check the appropriate	assignce category or catego	ries (will not be no	inted on the no	atent): 🖵 individual (☐ corporation or other private g	roup entity governm		
Please check the appropriate assignce category or categories (will not be p 4a. The following fee(s) are enclosed: 4			. Payment of l		2 corporation of other private g	governm		
☐ Issue Fee			☐ A check in the amount of the fee(s) is enclosed.					
□ Publication Fee			☐ Payment by credit card. Form PTO-2038 is attached.					
☐ Advance Order - # of Copies			☐ The Direct Deposit According	tor is hereby authorized by ount Number	charge the required fee(s), or (enclose an extra	credit any overpayment copy of this form).		
Director for Patents is reque	sted to apply the Issue Fee a	nd Publication Fee	(if any) or to	re-apply any previously pai	d issue fee to the application id	entified above.		
(Authorized Signature)		(Date)						
other than the applicant; interest as shown by the rec	Publication Fee (if require a registered attorney or agroods of the United States Pation is required by 37 CFR by the public which is to five is governed by 35 U.S.C. I see to complete including a	ent; or the assigne itent and Trademark	ee or other pa k Office.	arty in				
application. Confidentiality	is governed by 35 U.S.C. 1	22 and 37 CFR 1.1	4. This collec	tion is				

estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



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10/016,951	12/14/2001	Soo-Chang Choi	29926/38004	7382		
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MARSHALL, GERSTEIN & BORUN LLP			SPEARS, ERIC J			
6300 SEARS TOWER 233 S. WACKER DRIVE			ART UNIT	PAPER NUMBER		
CHICAGO, IL 6	50606		2878			
			DATE MAILED: 10/27/2003	3		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 251 day(s). If the issue fee is paid on the date that is three months after t mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a ha months) after the mailing date of this notice, the Patent Term Adjustment will be 251 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date th determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retriev (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



UNITED STATES PATENT AND TRADEMARK OFFICE

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10/016,951	0/016,951 12/14/2001		Soo-Chang Choi	29926/38004	7382
04743	7590	10/27/2003		EXAM	INER
MARSHALL, GERSTEIN & BORUN LLP				SPEARS, ERIC J	
300 SEARS TO 33 S. WACKE				ART UNIT	PAPER NUMBER
CHICAGO, IL 6	0606			2878	

DATE MAILED: 10/27/2003

Notice of Fee Increase on October 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2003, then t amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be increase in fees effective on October 1, 2003. See Revision of Patent Fees for Fiscal Year 2004; Final Rule, 68 Fe Reg. 41532, 41533, 41534 (July 14, 2003).

The current fee schedule is accessible from (http://www.uspto.gov/main/howtofees.htm).

If the fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due" but not the correct amount in vie of the fee increase, a "Notice of Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processi delays associated with mailing of a "Notice of Pay Balance of Issue Fee," if the response to the Notice of Allowan is to be filed on or after October 1, 2003 (or mailed with a certificate of mailing on or after October 1, 2003), t issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and t response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to t issue fee now due, then the difference between the issue fee amount at the time the response is filed and t previously-paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eigh Edition, August 2001).

Effective October 1, 2003, 37 CFR 1.18 is amended by revising paragraphs (a) through (c) to read as set forth below

Section 1.18 Patent post allowance (including issue) fees.

(a) Issue fee for issuing each original or reis except a design or plant patent:	•
By a small entity (Sec. 1.27(a))	\$665.00
By other than a small entity	
(b) Issue fee for issuing a design patent:	
By a small entity (Sec. 1.27(a))	\$240.00
By other than a small entity	
(c) Issue fee for issuing a plant patent:	
By a small entity (Sec. 1.27(a))	\$320.00
By other than a small entity	

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of t Office of Patent Publication at (703) 305-8283.